

Microbiology

NYU

477 1st Avenue

New York NY.

Feb  
10-2-52.

Dear Josh,

Thank you for your letter, and for

letting me see the ms of yr. & Norton's paper: I

have been through it 2 or 3 times, and have noted down

a number of minor suggestions which I hope may be

of value, mostly only proof-readers sort of stuff but I

hope what you wanted. As to the general presentation

I have only one major suggestion: as it stands one first

meets LA-2 and LA-22 as diauxotrophs (characters not

specified unless one looks at table at back), and FA

transduces LA-22 from diauxotrophy to nonexactness.

By page 8 you establish that FA only changes one

character at a time, and the change from diauxotrophy

to prototrophy is left unexplained right up to the

"discussion" p. 18. I think it might be more logical

to specify the characters of LA 2 and LA 22 when you

first mention them, and qualify you warn the reader

there that one of them is only a diauxotroph in

a rather special sense. I had not realized that an apparent double transformation was involved when I heard you speak at CSH, and when you sent me the strains I presumed that the aromatic requirements had all arisen <sup>in</sup> at one step. It sounds as though but for this <sup>(coincidence of 2 mutations at same site)</sup> you might not have discovered the FA situation as soon as you did.

I think it a very fine paper, & am much flattered at having been allowed to see it.

Things here are much as before. Having, I now consider, wasted 3 months on looking unsuccessfully for screenable markers, nutritional or fermentative, in *Pneumococcus*, I have now returned to the capsular character, which involves doing counts of transformed cells by the  $P_0 = e^{-n}$  method which is somewhat laborious but not impossibly so and I think I am now going to get some results: with  $\frac{1}{2}$  hr exposure to DNA there seems to be about a linear relation between DNA conc. & no. of transformed cells, up to a maximum of about 0.1% (in 1 expt.), which is what I had expected by extrapolation backwards from some unpublished expts. of R. Machesods.

I still have not heard anything  
received from Salmonella H. Hays,  
but continue to hope.

My regards to Esther & to Nolan

Yrs Sincerely

Bruce Stebbins